

Amendments to the Claims:

1. (Currently Amended) ~~Method~~ A method for producing a one-piece rotor [(1)] for a drag vacuum pump [(21)] which is designed, at least in sections, as a turbomolecular vacuum pump with rotor blades [(5)] and stator blades, ~~the~~ [(9)]. The rotor [(1)] ~~has~~ having a hub [(2)] whose peripheral surface supports  
5 [[the]] rotor-side pump structures,[[.]] ~~The~~ which rotor-side pump structures ~~consist~~  
include, at least in sections, of blades [(5),] which are arranged in rows [(4)] and  
which are formed from the surface of a blank by means of metal cutting  
operations,[[.]] ~~The~~ the metal cutting operations ~~consist of~~ comprising:

producing radial peripheral grooves [(3)] into which stator blade  
10 rows [(9)] engage when the pump is assembled;[[.]] ~~wherein~~ and  
in another metal cutting operation, ~~involves~~ providing the outer surface  
of the blank with one or more thread grooves [(13)].

2. (Currently Amended) ~~Method~~ The method according to  
claim 1, wherein ~~initially~~ the thread ~~structure is~~ grooves are produced first by milling  
and thereafter the peripheral grooves [(3)] are produced by turning.

3. (Currently Amended) ~~Method~~ The method according to  
claim 1, wherein the thread ~~structure~~ grooves and the peripheral grooves [(3)] are  
both produced by turning.

4. (Currently Amended) ~~Method~~ The method according to  
claim 1, wherein ~~first~~ the peripheral grooves [(3)] are produced first and thereafter  
the thread ~~structure~~ grooves are produced.

5. (Currently Amended) ~~Rotor~~ A rotor [(1)] manufactured  
according to the ~~methods~~ method of ~~one of the preceding patent claims claim 1,~~  
wherein the thread grooves [(13)] and the peripheral grooves [(3)] form rotor  
blades [(5)].

6. (Currently Amended) ~~Rotor~~ The rotor [(1)] according to claim 5, wherein ~~it exhibits over its entire height~~ the thread grooves [(13)] extend over the entire height and ~~section-wise~~ the peripheral grooves [(3)] are section-wise.

7. (Currently Amended) ~~Rotor~~ The rotor [(1)] according to claim 5 [[or 6]], wherein ~~the~~ a depth of the peripheral and thread grooves [(3, 13)] decreases at least in sections from [[the]] an intake side [(11)] towards [[the]] a delivery side [(12)<sup>3</sup>]] of the rotor [(1)].

8. (Currently Amended) ~~Rotor~~ The rotor [(1)] according to ~~one of the claims~~ claim 5 [[to 7]], wherein ~~it carries on its delivery side~~ [(12)] further including:

a coaxially arranged cylinder [(25)] on a delivery side.

9. (New) A vacuum pump with the rotor produced according to the method of claim 1.

10. (New) A method of producing a rotor for a vacuum pump comprising, in a cylinder blank in any order:

cutting a series of spiral grooves; and

cutting a series of peripheral grooves;

5 such that a plurality of peripheral rows of blades are defined with the blades in each row angularly displaced from an adjacent row.

11. (New) The method according to claim 10 wherein a depth of at least one of the peripheral and spiral grooves varies axially along the blank.

12. (New) A rotor produced in accordance with the method of claim 10.